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THE INTERCHANGE



DEPARTMENT OF HIGHWAYS EMPLOYEE'S NEWSLETTER

OCTOBER 1981

Individual Effort is Crucial

A couple of weeks ago I sent out a memo to all employees alerting you to further reductions in federal funds and what the Department would be doing in response to those reductions. I have no more information on the details of the reductions as of this writing than I did then.

However, there is one important point in that memo that I would like to expand on. The federal government is reducing the amount of money it is willing to commit to the nation's highways. Every indication we have is that this is a long-term trend, not something that is going to be reversed next year. Since federal funds make up a larger share of highway funding in Montana than in almost any other state, it is clear that the future of the highway program will depend more and more on money that comes directly from Montana taxpayers. It is equally clear that the willingness of Montana's taxpayers to support the highway program will, to a large degree, depend on what the people of Montana think about the Highway Department and the way we carry out our responsibilities.

Our attitude about our job, performance, willingness to work with the public, concern about public service, and the way we

spend money is not only important to employee performance but also has a direct relationship to our ability to obtain support for highway funding and programs.

In short, how each individual does his job does matter; it has a direct bearing on how many jobs in the Highway Department that the people of Montana will support. It has a direct bearing on our ability to fund your job.

Can this work to our advantage in obtaining support for the maintenance of a dependable, safe and efficient highway system in Montana? I think it can. Other states have gone through the same problems - reductions in funds, concern about Highway Department management, legislative review - have faced those problems squarely, and have come up with more support for a highway program than before. We can do the same thing.

Our success depends on whether each of us is concerned enough to make the effort.



Director Nominates Paulson and Spracklin For State Employees Incentive Award

Gilbert Paulson and William Spracklin, Glendive Equipment, are the first two Highways employees to be nominated for a state employees incentive award.

Paulson and Spracklin have invented a straightener for bent delineator and sign posts. Because of their resourcefulness and ingenuity, the Department is expected to realize substantial savings. Previously, bent posts could not be straightened and had to be replaced with new posts.

The straightener fastens to a Class 19 truck and is driven by the power of the hydraulic system. There are presently three straighteners available to circulate statewide as they are needed.

The award program was established by the legislature to "recognize and monetarily reward state employees in a timely manner for suggestions or inventions that contribute to the efficiency, economy, or other improvement of state government by reducing the costs of governmental operations." According to the enabling act, the incentive award may not be more than 10% of the savings resulting from implementing the employee's proposal for 1 year up to a maximum of \$500.

Employee Requests Get Results

Requests made to the Director during his recent visits to all field position offices resulted in some changes. Some are:

REQUEST 1. The Havre staff felt that over-weight vehicles were causing damage to our highways and requested more frequent visits by Gross Vehicle Weight portable scale crews.

RESULT: The crew was immediately sent to the Havre area and the G.V.W. Division plans to continue to observe this area on a regular basis with a portable scale crew.

REQUEST 2. A request was made to alter the work week to four 10-hour shifts during a portion of the summer for maintenance operations.

RESULT: This was tested in a few divisions and it worked well. The Department plans to contact union officials prior to next summer in order to amend present contracts to permit this flextime.

REQUEST 3. A request was made to utilize a short inventory form, which was previously discontinued, as it saved some preparation and processing time.

RESULT: The form is now being used.

REQUEST 4. A request was made to install a device to measure over-height vehicles at weigh stations in an attempt to prevent damage to bridges.

RESULT: This request has not been carried out as yet; however, Maintenance and G.V.W. Divisions are presently studying various methods to carry out this request.

GVW Violations

In August and September there were 367 overweight citations issued for a total due of \$18,413. There were 31 citations issued for between 10-20,000 pounds.

Citations for 20-25,000 pounds were: Lawrence Transportation, Glendive; Berge Holthves, White Sulphur Springs; and Saslovich, Anaconda.

Citations for 25-30,000 pounds: Luddy Logging, Plains; Golden Grain Empire, Great Falls; LaVelle Powder, Butte.

Citations for 30,000 and up: Glenn Haberts, Kevin (2); Matador Service Sidney; and Lawrence Transportation, Williston.

CONSTRUCTION PROGRESS

The summer of 1981 has been a very active one for the Construction Bureau. The almost perfect weather during the latter part of the summer and early fall has allowed contractors to complete paving on a number of important projects and open them to use by the traveling public.

The paving work, including overlay projects, completed this summer equals 24.0 miles of four-lane interstate, 42.0 miles of add two-lane interstate, 47.0 miles of two-lane primary, 32.0 miles of two-lane secondary, and 3.5 miles of urban road.

York Bridge

On two projects of special interest, work has progressed very well this summer. The substructure on the York Bridge near Helena has been completed and on several of the spans, beams have been set. This will allow early 1982 completion of the bridge. This bridge is unique in that the substructure had to be installed in as much as 65 feet of water. Much of the work was done from barges using techniques more common to the coastal states than to Montana. The steel bearing piles and the diesel pile hammer they were driven with are the largest every used on any of our projects.

Brady North/South

Recycling operations have been completed on the state's first interstate hot recycle project. From all indications to date recycling has proven practical and economical. Success of this project will no doubt lay the groundwork for future projects utilizing large scale recycling of old asphalt pavements.

Bridge Decks

In addition to the plant mix paving accomplished, 317,000 square feet of concrete bridge deck was placed on various interstate bridges near St. Regis this summer. These decks total some 1.4 miles in length. This is a record for a single season in one area and probably for the entire state.

BRIDGE REPLACEMENT AND REHABILITATION PROGRAM

This federal aid program began in 1970 and included only those bridges on the Federal-aid System. The program received a substantial increase in funding under the Surface Transportation Act of 1978 when the off-system, or local, bridges were declared eligible to participate. Montana is receiving approximately \$4.4 million in federal dollars per year which must be matched by \$1.1 million in state funds.

The increase in funds brought with it an increase in responsibility. All bridges of 20 feet in length or greater on any public road are eligible. The number of bridges increased two-fold with the addition of about 2200 county and city bridges.

Letting Plans . . . October and November

The following is a list of the projects currently scheduled for the October 29th and November 19th bid openings.

Project Location	Month	Urban Projects	Miles
Great Falls	Oct.	Cleanup & Restoration	—
Helena	Oct.	Signals	—
Missoula	Oct.	Signal Revision, Business District Update	—
Billings	Oct.	Signals-State & 6th/Underpass Ave.	—
Billings	Oct.	Zimmerman Trail & Mont. Ave.	—
Bozeman, Kalispell	*Nov.	Intersection Improvements	—
Missoula			
Interstate Projects			
Shelby-I-15	Nov.	Recycle & Overlay (North & South)	16.8
Great Falls-I-15	Nov.	Plant Mix Surface (Frontage Road-So.)	3.6
Bonner-I-90	Nov.	Plant Mix Surface (East)	9.3
Mossmain-Lockwood	Nov.	Plant Mix Surface	15.8
Secondary Projects			
Virginia City-West	Oct.	Plant Mix Surface Overlay	6.0
Baker-North	Oct.	Plant Mix Surface Overlay	8.9
Madison Bridge-Bzm.	*Nov.	Bridge End Treatment	0.5
Colstrip-Forsyth	*Nov.	Armell's Cr.-Grade, gravel, surface structure	6.4
Rural Secondary			
Loring-North	Oct.	Grade, gravel, surface	5.0
Phillips County	Oct.	Signing	20.9
Kalispell area	*Nov.	**Ashley Creek structure & approaches	—
Ulm	*Nov.	Missouri River structure & approaches	—

*Letting subject to availability of federal funds.

**Subject to resolving utilities.

The program required each bridge to be inspected on a two year cycle. The inspection and the subsequent load rating is necessary to determine its safety for carrying vehicular loads and its cost of rehabilitation or replacement. Bridge inspection is conducted by bridge inspectors assigned to the construction divisions and the structural analysis is accomplished by the Bridge Bureau. In order to meet a December 31, 1980 deadline for the local bridges, the Department retained the services of consulting firms to help in inspection and analysis tasks.

The Planning & Research Bureau is responsible for maintaining the file on all bridges for each system, i.e. Interstate, Primary, Secondary, Urban, and Local. Lists of bridges that need to be inspected or reinspected are sent to each of the 11 divisions. Upon receiving the inspections, the Bureau requests the Bridge Bureau to load rate the structure based on the inspection report. Any changes in the condition or load rating in a bridge is entered into the file. Annually the updated bridge file is transmitted to the FHWA, where it is used to determine the amount of allocation of funds to each state for Bridge Replacement or Rehabilitation.

In order to select bridge structures for replacement funds, the Department has developed a Comparative Significance Rating. This rating system is useful in ranking those bridges that have been determined to be eligible by the Sufficiency Rating.

The Comparative Significance rating is a composite number made up of various factors such as the bridge's load rating; functional class of roadway the bridge carries; the average daily traffic using the bridge; the detour distance traveled if the bridge is closed; priority ranking determined by Board of County Commissioners or city council; if the bridge serves a mail route, school bus route or defense route; the population using the bridge; if the bridge serves an industrial facility, recreation site, or any agricultural operations. The total of these factor numbers is the Comparative Significance Rating. The higher the rating the more justification for replacement or rehabilitation of the bridge structure.

A method in which the total bridge needs of a road system or political subdivision can be determined is to make a comparison of the total bridge area to the deficient bridge area contained in each geographic area. This method is similar to the road Sufficiency Rating as used to determine the needs of each financial district. The area of those bridges with sufficiency ratings less than 50% and consequently eligible for replacement, are totaled. Added to this replacement bridge area is a percentage of the area of bridges with a sufficiency between 50% and 80%. These bridges are eligible for rehabilitation. This total deficient bridge area for each system or political subdivision represents the relative need to receive bridge replacement and rehabilitation funds.

SNOW REMOVAL PLANS

The safety of the traveling public during inclement weather is still a major concern of the Department of Highways, but with the budget restrictions that all governmental agencies are facing, certain guidelines have to be enforced. As a result, all State maintained highways and city streets have been separated into five different classes.

Each division will release a detailed snow removal and sanding plan, following these general guidelines:

Class I - (Highways with 4000 vehicles per day or over): During a storm these roadways will be plowed, sanded and widened as quickly as possible even though this may involve working extra hours at night, weekends or holidays. In general, under normal conditions, the plowing frequency should keep snow accumulations less than two inches. Chemicals, sand or mixture of the two will be applied to improve traction. Priority will be given to steep grades, sharp curves, intersections, bridges and bridge approaches. Sanding of tangents or straightaways will not be a normal operation. Interstate 90 from Billings to Bozeman and U.S. 93 from Hamilton to Kalispell are examples of Class I highways.

Class II - (Average daily traffic 1000 to 4000): Snow will be removed while the storm is in progress. The major effort is keeping the road open with less emphasis on reaching bare pavement. In general, under normal storm conditions, the plowing frequency should keep snow accumulations less than three inches in traffic lanes. Traction aids such as chains or snow tires may be required. Chemicals, sand or a mixture of the two will be applied to hills, curves, intersections, bridges and bridge approaches. Signs advising of the use of traction aids will be placed along the highways and information systems will advise motorists as necessary. Interstate 94, Glendive to the North Dakota line, and U.S. 191, Idaho line to Bozeman, are both Class II roadways.

Class III - (Average traffic counts of 250 to 1000 daily): Snow will be removed during storms to keep the travelway open for traffic. In general under normal storm conditions, the plowing frequency should keep snow accumulations under four inches. Before termination of snow removal efforts, chemicals, abrasives or a mixture of the two shall be applied to hills, curves intersections, bridges and bridge approaches. Examples of Class III highways are Montana 28, Plains-Hot Springs-Elmo, and U.S. 312, Miles City to Broadus.

Class IV - (50 to 250 average daily traffic): Snow will be removed only during regular working hours as required to obtain passable conditions - snowpack will be acceptable. Two roadways in Montana falling



NEW MAINTENANCE FACILITY OPENS

An open house was held in Helena's new energy-efficient highway shop complex on October 15th. The new building replaces out-dated metal and frame buildings located at the Lewis and Clark Fairgrounds.

More than half of the two-story, 100 x 200 foot building is underground. Other energy-saving features include minimal windows and doors, insulated precast concrete walls, a window bank on the roof to absorb solar heat and roof-mounted solar collector panels to provide hot water.

The shop will be used for assembly and central repair of heavy equipment in addition to major maintenance and repair of snow plows, trucks, road graders and other vehicles. A machine shop, parts storage area, road sign production unit and carpentry shop will also be housed in the building.

With the completion of the shop complex, only the aircraft, core drill and motor pool units of the Department of Highways will remain in other localities.

into this category are Montana 80, Geraldine to Stanford, and Old U.S. 91, Lima to Dillon.

Class V - City Streets: Snowpack is allowable on these streets when the Department is unable to remove snow with conventional plowing equipment, chemicals, sand or a mixture of the two will be applied to intersections and hills to insure traction. Overtime may be allowed on Class V roadways. Tenth Avenue South in Great Falls and Broadway Street in Missoula would be examples of Class V city streets.

Each Maintenance Division Chief will designate shifts to appropriately perform service for each section of roadway considering the average daily traffic, school bus schedules, other vital services, and the commuter traffic involved. In addition, each Maintenance Division Chief will prepare a map showing highway classes and the times of operation for all routes under their jurisdiction. In addition, each Maintenance Division Chief will give this information to the local newspapers and news media and will be prepared to verbally discuss the policy with all concerned citizens, highway patrols, school districts and other organizations.

Approximately one million dollars will be saved annually by the adoption of the new policy snow removal and sanding which is effective immediately.

NEW EQUIPMENT PROCESSING

"What is the procedure for receiving new equipment and how is it released to the user?" These are two questions that are asked repeatedly by personnel in the Divisions.

New equipment is generally purchased FOB Helena. After it is received, the Helena shop foreman makes a thorough inspection of each piece of equipment. During this inspection he checks for compliance to the specifications and any mechanical or structural defects. Any specification deficiencies or other problems are noted on his inspection sheet and the vendor is notified so he may correct the problems. In most cases these problems are corrected before the equipment is released to the user and before final payment is made to the vendor.

Also before equipment is released to the user, the Helena shop assigns unit numbers, installs decals and any necessary special equipment, lights, etc. After these procedures are complete the equipment is then ready for release to the user and transfer messages are initiated. If the new equipment is unique or unfamiliar, training programs are arranged with manufacturers or vendors before the equipment is put into full use.

Understanding the Process Posting Vacancies:

When a vacancy occurs, the Supervisor of the area where the vacancy exists submits a requisition to the Personnel Office. Job Posting Notices are posted for seven working days to allow interested employees an opportunity to apply. The day after the closing date, in-house applicants are listed on a form known as a "RECAP". The recap is sent to the Supervisor for consideration and possible selection. The Supervisor goes through a selection process to determine who is the best qualified employee for the position. This process may or may not include a personal interview. The supervisor is not under a deadline as to when he/she will do the interviewing or make a selection. When the supervisor has made a selection from the recap, it is returned to the Personnel Division. Personnel notifies successful and non-successful applicants in writing.

MPEA members cannot bid in-house on a Maintenance vacancy, but they can submit a State Application to the local Job Service if the vacancy is not filled in-house. Everyone can bid on Management Positions, which are now being posted.

Anyone who is applying for an in-house position must have their application in to the Personnel Division by the closing date or they will not be considered for the vacant position.

Effective July 1, the Personnel Division does not furnish Personnel related forms; you will order them through Central Supplies and they will be charged to the area's individual budget.

Some forms that we have furnished in the past that you will now have to order from Central Supplies are:

- State of Montana Application Form PD25
- In-House Application Form P147F
- Handicapped Applicant Flow Form A
- Applicant Log Form D
- Position Description Forms
- Any Personnel-Related Forms

The new series from the Personnel Division will cover the process of filling a vacancy when no in-house applicants apply for a vacancy or when the applicants who do apply do not meet the qualifications.

1900 copies of this newsletter were produced at a cost of \$.15 each.

Rae Childs, Public Information Officer, Editor

SAFETY FIRST:

Loading & Unloading Asphalt Material

The change of season requires some changes in all of our daily activities. The most obvious change in procedure is in the safe loading and unloading of asphalt material. In order to reduce the danger involved in heating valves and lines, some safeguards should be taken to ensure that exposure to serious injuries resulting from this operation is at a minimum. In an experiment at the Helena asphalt storage facility, a heat tape was used on the discharge line and valve on the MC250 road oil tank. It was turned on at the same time as the heaters and although the temperature was in the 20's it required no other source of heat to obtain a free flow of material from the tank. The heat tape was wound around the valve and line and was covered with fiber glass insulation which was held in place with tape. A similar method can be adapted for use on any storage tank.

If you know of an improvement or feel that any part of this operation can be accomplished in a safer manner, let us know, it should be shared with everyone.

Reduce Injuries & Improve Health

Della Witt, R.N., has joined the Safety and Training Bureau as a nurse practitioner.

The primary purpose of this position is to ensure optimum health levels for all employees. Witt's immediate goal is to reduce lost working days due to injuries, by identification of high injury areas, by development of improved safety techniques which will modify hazardous conditions and by establishment of an early return-to-work plan.

Witt hopes to increase employee health awareness through health risk inventories, counseling in nutrition, and fitness. As part of this program, she will screen employees to detect potential health problems including hypertension, vision and hearing impairment, diabetes and respiratory functions.

Minority Business Success Story

In January a Native American came to this office for information and assistance in becoming a Minority Business Enterprise (MBE) Contractor. Monte Azure lives in St. Ignatius, Montana. He, his father, and brother had been building farm fence for twelve years. He had also been involved in most aspects of construction work. Monte decided that he would like to go into business for himself, but did not know all of the requirements necessary to start.

After meeting with Larry Moore of the Montana Contractors Association (AGC), and Peg Dolan, MBE Program Manager for the Department, it was determined that

Azure should do the following: (a) apply for a State Contractor's License; (b) prepare a financial statement; (c) obtain information on prequalification and bonding; and (d) apply for a loan from the Small Business Administration (SBA).

Azure followed all of the guidelines and instructions, and had all his paper work completed well in advance of the construction season. He became prequalified by the Montana Department of Highways, received bonding from a Surety Guarantee Agency, procured a loan from the Small Business Administration (SBA), and secured a contractor's license from the Department of Revenue. As a result of these actions, Azure was the low bidder for a subcontract on 23 miles of right-of-way fencing. This contract amounted to \$123,000.

This program is possible through a Supportive Service Contract provided by the Federal Highway Administration. The Department of Highways' MBE Program is very proud that we had a part in Azure's success as an MBE.

Field Business Managers and Accounting Technicians Meet

Bill Salisbury, centralized services division administrator, conducted a two-day meeting in Helena with the 11 Field Business Managers and Accounting Technicians. The meeting gave him the opportunity to meet the field staff, discuss some changes in accounting procedures and inform the managers of his goals for the year. The agenda included discussions on data processing updates, such as the new rental equipment teleprocessing system; proper claims processing; establishing good audit and budgeting documentation; EEO updates; a review of field position classifications; a word processing demonstration; the beginning of the performance appraisal for business managers; and a presentation by training officer, LeRoy Broughton, which included a demonstration of the new video training equipment.

Salisbury emphasized the increased level of responsibility for the field business managers in controlling areas under their direct supervision, such as inventories, training, budgets, and personnel supervision. He noted that these responsibilities will be reflected in the performance appraisal of each individual.

The participants learned of the goals set for the Centralized Services Division for the fiscal year. They are: to improve the present budgeting system, improve control and accountability for inventory and supplies, improve management, reduce operating costs, and improve public service.

Montana State Library



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